REMARKS

Applicants have considered the outstanding official action. It is respectfully submitted that the claims are directed to patentable subject matter as set forth below.

Claims 29-43 are rejected under 35 U.S.C. §112, second paragraph, as indefinite based on the phrase "and/or" in claim 29 at line 13 and in claim 30 at line 5. Applicants respectfully disagree. However, to simplify prosecution, claims 29-30 have been amended to remove the phrase "and/or" therefrom. Accordingly, withdrawal of the 35 U.S.C. §112, second paragraph, rejection of claims 29-43 is respectfully requested.

The sole rejection based on art is of claims 29-43, 46-59 and 62-64 under 35 U.S.C. §103(a) over U.S. Patent No. 5,978,818 (Perini) in view of U.S. Patent No. 6,565,033 B1 (Biagiotti).

Claims 29, 46 and 47 are the only independent claims. Claim 29 is directed to a rewinding machine of a specified structure including a path for feeding a web material towards a winding system; an interruption member to interrupt the web material at an end of winding of a log;

and a core insertion channel. The channel is defined by a stationary rolling surface and a movable member including a series of parallel spaced apart flexible members entrained around at least two rollers. The rewinding machine further comprises a core feeder to insert winding cores in succession in the channel; and an electrostatic device to electrostatically charge at least one of the web material and the winding cores to provide, due to electrostatic charges, reciprocal adhesion of each core and an initial free edge of the web material obtained by interruption of the web material at an end of winding of each log. The claimed electrostatic device includes at least one charge bar connected to a voltage source, wherein the charge bar is positioned along the core insertion channel.

Claims 46 and 47 are directed to methods for producing logs of wound web material. The method of claim 46 includes interrupting a web material at an end of winding of a first log to form a final free edge of the first log and an initial free edge for winding of a second log; and adhering the initial free edge to a second core by application of electrostatic charges which produce reciprocal attraction between the second core and the initial free edge. The application of the electrostatic

charges is after the second core has come into contact with the web material.

The method of claim 47 also includes interrupting a web material at an end of winding of a first log forming a final free edge of the first log and an initial free edge for winding of a second log; and provides for adhering the initial free edge to a second core by application of electrostatic charges which produce reciprocal attraction between the second core and the initial free edge. The cores are inserted into an insertion channel defined by a stationary rolling surface and a movable member including a series of parallel spaced apart flexible members entrained around at least two rollers. The application of the electrostatic charges occurs along the channel.

Perini discloses a rewinding machine for forming rolls of web material on a core including a first winder roller 15 around which web material N is fed, and a second winder roller 17, together forming a nip 19, through which core A and web material N pass. Perini discloses that the leading edge of the web material adheres to the new core by glue and the friction exerted on the web material by channel 39, not by electrostatic charges as claimed. Perini contains no disclosure regarding an electrostatic device or

the application of electrostatic charges at any point in the rewinding process.

The Examiner states that "the concept of using electrostatic charges (i.e., which inherently has a voltage source and a charge bar) to provide adhesion to the web" is disclosed by Biagiotti citing column 3, lines 59-62. However, the cited portion of Biagiotti only provides the general disclosure that "[t]here is no reason why use should not be made of other systems for starting the winding of the free edge of the web material, such as electrostatic charges, suction spindles, or other equivalent systems". Biagiotti does not provide any teaching about how electrostatic charges should be applied, by what means electrostatic charges should be applied, where the apparatus should be located in the rewinding machine, or how the apparatus should interact with the cores and web material. There is no indication in Biagiotti, directly or by suggestion, as to the positioning of a device to provide electrostatic charges in the rewinding machine or its manner of application during the rewinding process.

Applicants' rewinding machine specifically claims an electrostatic device which includes at least one charge bar connected to a voltage source and that the charge bar is

positioned along the core insertion channel. Further, applicants' claim that the electrostatic device charges at least one of the web material and the winding cores to provide reciprocal adhesion between each core and an initial free edge of the web material. These limitations are not taught or suggested by Biagiotti. Rather, Biagiotti is entirely silent as to specific structure, placement and manner of application of any electrostatic device in the rewinding machine.

Since neither Perini nor Biagiotti provide any concrete teaching as to structure or arrangement of an electrostatic device in a rewinding machine and the structure of the rewinding machine of Biagiotti differs from that of the rewinding machine taught in Perini, one skilled in the art would have no direction and, thus, difficulties in designing an electrostatic charger suitable for use in a rewinding machine as disclosed in Perini as relied on by the Examiner in the rejection. For example, applicants note that electrostatic charges are non-permanent in nature. Once electrostatic charges are applied on a product, the charges tend to freely discharge due to the product contacting conductive members. Further, electrostatic charges tend to dissipate due to environmental conditions

such as humidity, as well as, the electrostatically charged product contacting surrounding objects. Accordingly, applying electrostatic charges to a product along a production line where the product comes into contact with other objects is not a simple and straightforward operation. Therefore, in view of the lack of further description, the limited statement in Biagiotti relied on by the Examiner is insufficient to design a rewinding machine wherein electrostatic charges are effectively and efficiently applied on a winding core and/or web material such that the charges would not disappear before winding starts, in particular in a consistent, repeatable manner.

Applicants' claimed rewinding machine and method provide for such effective, efficient and repeatable application of electrostatic charges. An electrostatic charge bar is arranged along a core insertion channel formed by a stationary surface and flexible members, where the core is inserted and the web material is interrupted. This arrangement provides electrostatic charges only at the specific location and time that the charges are required. Accordingly, applicants' claimed rewinding machine applies electrostatic charges to each core and/or the web material only in the location where the web material adheres to the

core and at the time required for adhesion. Applying the electrostatic charges to the web material and/or the cores only when the charges have to act avoids dissipating the charges to the environment or to other objects along the web advancement path. Accordingly, applicants' machine and method as claimed provide for charging the web material and/or cores at the time and position where the charges are required, i.e., where the leading edge is formed and is anchored to the new core. This is not taught or suggested by the applied references.

Accordingly, the combination of Perini in view of Biagiotti does not render claims 29-43, 46-59 and 62-64 obvious within the meaning of 35 U.S.C. §103. Withdrawal of the §103 rejection is requested.

Reconsideration and allowance of the claims are respectfully urged.

Respectfully submitted,

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